



EPA Region 7 TMDL Review Form

TMDL ID 20

Water Body Name Howell Creek

Pollutant Chlorine

Tributary

Water Body ID MoWBID 2582

State Missouri

HUC 11010010-010001

Basin

Submittal Date 1/2/01 *Completion Date* 1/23/01

Approved Yes

Submittal Letter: State submittal letter indicates final TMDL(s) for specific pollutant(s)/ water(s) were adopted by the state, and submitted to EPA for approval under section 303(d) of the Clean Water Act.

Submitted as a final TMDL under a cover letter received 2 January 2001 for chlorine in Howell Creek.

Water Quality Standards Attainment: TMDL and associated allocations are set at levels adequate to result in attainment of applicable water quality standards.

The allocation of Total Residual Chlorine, TRC, is set to achieve the numeric criterion for chlorine in the discharge. Since the discharge will meet standards, the standards will be attained in Howell Creek.

Numeric Target(s): Submittal describes applicable water quality standards, including beneficial uses, applicable numeric and/or narrative criteria.

The beneficial uses and the applicable water quality standards are described. The numeric target for TRC is the water quality criterion for TRC.

Source Analysis: *Point, non point and background sources of pollutants of concern are described, including magnitude and location of the sources. Submittal demonstrates all significant sources have been considered.*

There are no nonpoint sources of chlorine. There is one point source, which is the West Plains WWTP. All significant sources have been considered.

Allocation: *Submittal identifies appropriate waste load allocations for point, and load allocations for non point sources. If no point sources are present the waste load allocation is zero. If no non point sources are present, the load allocation is zero.*

There are no nonpoint sources of chlorine, and the nonpoint allocation is established at zero pounds per day of TRC. The allocation to the West Plains WWTP is established at 0.209 pounds per day of TRC. The allocations include a margin of safety.

Waste Load Allocation:

The point source allocation is established at 0.209 pounds per day of TRC.

Load Allocation:

The nonpoint source allocation is zero.

Margin of Safety: *Submittal describes explicit and/or implicit margin of safety for each pollutant.*

The margin of safety is implicit. The allocation is established at zero flow in Howell Creek and maximum (design flow) of the WWTP. These extreme flow conditions are a rare event.

Link Between Numeric Target(s) and Pollutant(s) of concern: *Submittal describes relationship between numeric target(s) and identified pollutant sources. For each identified pollutant, the submittal describes analytical basis for conclusions, allocations and margin of safety that do not exceed the load capacity.*

The numeric target is the water quality criterion for TRC. The source of the chlorine is the West Plains WWTP.

Seasonal Variation and Critical Conditions: *Submittal describes the method for accounting for seasonal variation and critical conditions in the TMDL(s).*

Seasonal variation is considered by using the low flow as the critical condition. The numeric target applies to the West Plains WWTP discharge year round.

Public Participation: *Submittal describes public notice and public comment opportunity, and explains how the public comments were considered in the final TMDL(s).*

This TMDL was put on public notice. The public comments and Missouri's response to the comments are on file with MDNR.

Monitoring Plan for TMDL(s) Under Phased Approach: The TMDL identifies the monitoring plan and schedule for considering revisions to the TMDL(s) (where phased approach is used).

Monitoring will be conducted by the West Plains WWTP under an NPDES permit. If monitoring reveals that water quality standards are not being met, this TMDL will be reopened and re-evaluated.

Reasonable Assurance: Reasonable assurance only applies when reductions in non point source loading is required to meet the prescribed waste load allocations.

Nonpoint source loading reductions are not required.